

ABSTRACT

Degradations of the image acquired by a fundus camera, including those due to intraocular defects are reduced by digitizing the image, taking an FFT of row and column image data, correlating the FFTs of the rows and of the columns to obtain resultant row product vectors and column vectors. The Nth root of the resultant row and column product vectors is computed, where N is the respective numbers of rows and columns. A minimum offset term is subtracted from each element of the resultant vector to obtain the PSF spatial spectrum (MTF) of the eye. Each row FFT and each column FFT is then divided by the MTF after which the inverse FFT yields a restored distortion-reduced image.